

AMENDMENTS TO AND LISTING OF THE CLAIMS

This listing replaces all previous claim listings in the application.

What is claimed is:

1. (CANCELED)
2. (CANCELED)
3. (CURRENTLY AMENDED) ~~The method of claim 1,~~ A method for forming a semiconductor material from powders comprising at least one component belonging to the group formed by the elements of column IV of the Mendeleiev table and their alloys, said method comprising:

one or more steps of compression of said powders; and

one or more thermal processing steps such that at least part of the powders is melted or made viscous,

wherein, at least one of the one or more compression steps and at least one of the one or more thermal processing steps are simultaneous, and

wherein at least one of the one or more thermal processing steps is such that only powders belonging to a specific area of the material are melted or made viscous.

4. (CURRENTLY AMENDED) ~~The method of claim 1,~~ A method for forming a semiconductor material from powders comprising at least one component belonging to the group formed by the elements of column IV of the Mendeleiev table and their alloys, said method comprising:

one or more steps of compression of said powders; and

one or more thermal processing steps such that at least part of the powders is melted or made viscous,

wherein, at least one of the one or more compression steps and at least one of the one or more thermal processing steps are simultaneous, and

wherein the powders comprise silicon powders and powders of at least another component, the thermal processing being such that the silicon is not melted and that at least one of the other components is melted or made viscous.

5. (CURRENTLY AMENDED) ~~The method of claim 1,~~ A method for forming a semiconductor material from powders comprising at least one component belonging to the group formed by the elements of column IV of the Mendeleiev table and their alloys, said method comprising:

one or more steps of compression of said powders; and

one or more thermal processing steps such that at least part of the powders is melted or made viscous,

wherein, at least one of the one or more compression steps and at least one of the one or more thermal processing steps are simultaneous, and

wherein the powders comprise doped semiconductor powders and undoped semiconductor powders, the thermal processing being such that only the doped powders are melted.

6. (CURRENTLY AMENDED) ~~The method of claim 1,~~ A method for forming a semiconductor material from powders comprising at least one component belonging to

the group formed by the elements of column IV of the Mendeleiev table and their alloys,
said method comprising:

one or more steps of compression of said powders; and

one or more thermal processing steps such that at least part of the powders is
melted or made viscous,

wherein, at least one of the one or more compression steps and at least one of
the one or more thermal processing steps are simultaneous, and

wherein the compression step is preceded by a step consisting of placing
powders on a plate, the powders being different as to at least one of their
nature, their granulometry, and their doping according to their location on
the plate.

7. (CURRENTLY AMENDED) The method of claim [[1]] 3, wherein during the
compression step, said powders are pressed between plates having a surface capable
of texturizing the surface of the material.

8. (PREVIOUSLY PRESENTED) A semiconductor material obtained at least
partially by compression and thermal processing of powders comprising at least two
distinct areas formed of distinct components belonging to the group formed by the
elements of column IV of the Mendeleiev table and the alloys thereof.

9. (ORIGINAL) The material of claim 8, wherein said areas are superposed.

10. (PREVIOUSLY PRESENTED) A structure or a component formed of one or
comprising at least one semiconductor material comprising grains and/or aggregates

exhibiting energy gaps of different value, wherein the grains and/or aggregates comprise at least two elements of column IV of the Mendeleiev table, or

wherein the grains and/or aggregates comprise at least one element of column IV of the Mendeleiev table and at least one alloy of an element of column IV of the Mendeleiev table.

11. (PREVIOUSLY PRESENTED) A method for forming a semiconductor material from powders comprising at least one component belonging to the group formed by the elements of column IV of the Mendeleiev table and their alloys, said method comprising a step of compression of said powders and a thermal processing step such that at least part of the powders is melted or made viscous,

wherein the thermal processing is such that only powders belonging to a specific area of the material are melted or made viscous.

12. (PREVIOUSLY PRESENTED) A method for forming a semiconductor material from powders comprising at least one component belonging to the group formed by the elements of column IV of the Mendeleiev table and their alloys, said method comprising a step of compression of said powders and a thermal processing step such that at least part of the powders is melted or made viscous,

wherein the powders comprise silicon powders and powders of at least another component, the thermal processing being such that the silicon is not melted and that at least one of the other components is melted or made viscous.

13. (PREVIOUSLY PRESENTED) A method for forming a semiconductor material from powders comprising at least one component belonging to the group formed by the

elements of column IV of the Mendeleiev table and their alloys, said method comprising a step of compression of said powders and a thermal processing step such that at least part of the powders is melted or made viscous,

wherein the powders comprise doped semiconductor powders and undoped semiconductor powders, the thermal processing being such that only the doped powders are melted.

14. (PREVIOUSLY PRESENTED) A method for forming a semiconductor material from powders comprising at least one component belonging to the group formed by the elements of column IV of the Mendeleiev table and their alloys, said method comprising a step of compression of said powders and a thermal processing step such that at least part of the powders is melted or made viscous,

wherein the compression step is preceded by a step consisting of placing powders on a plate, the powders being different as to at least one of their nature, their granulometry, and their doping according to their location on the plate.